



Photo by Emmett Given

Helping dad

Jeremy Lawrence helps his dad Tim clean a liner for a Fastrac engine while visiting Marshall for "Take Our Children to Work Day" June 24. See related story on page 4.

X-34 demonstrator captive carry test flight a success

The first of several captive carry flights between the X-34 technology testbed demonstrator and its L-1011 aircraft was conducted Tuesday from NASA's Dryden Flight Research Center, Edwards, Calif. The purpose of the first of several tests was to verify the safety of the combined vehicles for Federal Aviation Administration certification purposes because of modifications to the L-1011 carrier vehicle.

Takeoff took place at 10:12 a.m. PDT, with landing at 12:02 p.m. PDT. Initial data indicates that no major problems occurred in the first one-hour, 50-minute flight. Additional flights will be required to examine the entire flight profile for X-34 and its carrier before subsequent air-launched and unpowered approach and landing flights later in the year.

Several planned test objectives were accomplished during the flight. Performance of the aircraft was evaluated during several scheduled maneuvers at various speeds and altitudes. The L-1011 crew conducted a simulated rocket engine propellant release

See X-34 on page 5

Apollo 11 celebration to feature astronauts, much more

by Mike Wright

On July 17 several Apollo/Saturn era astronauts will join hundreds of Marshall employees, on-site contractors, retirees, guests and family members to celebrate the 30th anniversary of Apollo 11, the mission that took the first humans to the surface of the Moon.

Apollo 11 astronaut Buzz Aldrin along with Apollo 12 astronaut Richard Gordon are scheduled to participate in the celebration which coincides with this year's annual Marshall picnic. Also expected to attend the celebration are Apollo 7 astronauts Walter Schirra and Walter Cunningham, Apollo 14 astronaut Edgar Mitchell, Apollo 15 astronaut Alfred Worden and Apollo 16 astronaut Charlie Duke. An invitation also has been extended to Skylab and Shuttle astronaut Owen Garriott.

"We feel very honored that these Apollo astronauts have decided to join us for the celebration," said Sandra Turner,

who is chairing Marshall's Apollo 11 Anniversary Celebration. "We look forward to their visit as well as to participating in other Apollo 11 anniversary activities during the week of July 12-17. In addition, we are encouraging Marshall people to participate in other off-site celebration activities planned at the U.S.

Among the many special guests that Marshall is encouraging to attend the Apollo 11 30th anniversary celebration are Saturn/Apollo era retirees. The celebration is intended to symbolize the vital role they played in the nation's space program. Saturn/Apollo era retirees will be seated in a special section of the Von Braun complex courtyard beginning at 3 p.m. To reserve seats in that section, call Marcia Cobun of the Government and Community Relations Department at 544-1715 before July 12.

Space & Rocket Center and in the community."

In addition to the astronaut visits, the week of celebration will include many other activities. The list includes a proclamation signing, a broadcast of Apollo era historical footage and a special appearance by Marshall retiree and author Homer Hickam. Also planned are a "pass the torch" relay run, the annual Marshall Center picnic festivities, a "Footprints to the Future dedication" and a special unveiling illustrating the Center's role in the future of space transportation.

Center Director Art Stephenson will welcome Huntsville Mayor Loretta Spencer, Madison Mayor Chuck Yancura and Madison County Commissioner Mike

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"Live Safety — Safely Live"
— Safety slogan submitted by
Linda Carpenter, AD02

Stephenson names directors of three Marshall directorates

Center Director Art Stephenson has named directors for three of Marshall's new directorates. The appointments are in conjunction with the Center's restructure objective to increase focus on assigned roles and missions, the following three employees have been named as directors.

Dr. Millard F. (Frank) Rose has been reassigned director of the Science Directorate. He had served as deputy director of the Space Sciences Laboratory in the Science and Engineering



Dr. Frank Rose, director, Science Directorate

Directorate.

Rose gained vast experience and expertise in multidisciplinary research, including microgravity science, during his employment in private industry, academia and the federal sector.

From 1985 to 1998, he served as director of the Space Power Institute at Auburn University, where he managed and

directed research activities. Areas of research included microgravity materials science, silicone carbide electronics, electronic packaging, advanced power technology for space and terrestrial applications, space environmental effects and space outgassing and vapor pressure phenomena. The Institute made major advances and enjoyed unprecedented growth during his tenure.

During the early years of his career, Rose worked as a scientist and researcher for the Naval Surface Warfare Center. He holds a doctorate and master's degree in solid state science from Pennsylvania State University in University Park, Pa., and a bachelor's degree in physics from the University of Virginia in Charlottesville, Va. He has authored or co-authored over 180 technical documents covering a wide range of subjects.

Axel Roth has been reassigned director of the Flight Projects Directorate. Roth had served as both director and deputy director of the Program Development Directorate.

Roth has been employed at Marshall since 1960 and has served in a number of key positions with extensive technical experience in the development of major programs such as Saturn, Skylab, Spacelab and Space Station Freedom. He has held a number of progressively important positions at Marshall including Payload Operations director; manager, Operations Office; manager, Habitability Module Office; and deputy manager, Space Station Projects Office.

He holds a bachelor's degree in aeronautical engineering from Auburn University.

James W. Kennedy has been reassigned director of the Engineering Directorate. In January, he was appointed acting director of the Science and Engineering Directorate, and as an additional duty served as acting director of the Missions Operation Laboratory. Prior to this, he served as deputy director of the Science and Engineering Directorate.

Kennedy transferred from Kennedy Space Center, Fla., to Marshall in 1969 as a cooperative education student. After graduation from college in 1972, he joined the U.S. Air Force. In 1980, he accepted a permanent appointment at Marshall as an engineer assigned to the Project Control Office in the Space Shuttle Projects Office. He has held progressively responsible positions, including temporary duty in the Shuttle Program Office at NASA Headquarters and Marshall resident manager at Kennedy Space Center, Fla.



James Kennedy, director, Engineering Directorate

He holds a master's degree in business administration from Georgia Southern University in Statesboro, Ga., and a bachelor's degree in mechanical engineering from Auburn University.



Axel Roth, director, Flight Projects Directorate

Key Personnel Announcements

In conjunction with the Center's restructure objective to increase the focus on assigned roles and missions, the following employees have been reassigned.

Dr. William R. Humphries has been reassigned assistant to the director of the Flight Projects Directorate. He previously served as director of the Structures and Dynamics Laboratory in the Science and Engineering Directorate.

Humphries joined Marshall in 1963 as an aerospace test engineer. He has served in progressively responsible positions, gaining invaluable experience in the areas of propulsion and mechanical systems design, analysis and testing of launch and space vehicles.

John W. Kilpatrick Jr. has been reassigned deputy director of the Engineering Directorate, and as acting director of Marshall's Systems Management Office. He had served as director of the Systems Analysis and Integration Laboratory in the Science and Engineering Directorate.

Kilpatrick joined Marshall in 1968 as an aerospace engineer in the former Mission Operations Office. His expertise has contributed to major programs such as Skylab, Spacelab, the International Space Station and payload development in multiple science disciplines.

Earnest C. Smith has been reassigned as assistant to the director of the Engineering Directorate. He had served as director of the Astrionics Laboratory in the Science and Engineering Directorate.

Smith joined Marshall in 1964 as an engineer in the Systems Integration Section in the Astrionics Laboratory. Since that time, he has held various increasingly responsible positions.

Jack Bullman has been reassigned manager of the Avionics Department in the Engineering Directorate. He had served as deputy director and acting director of the Program Development Directorate. He came to this position from a dual assignment at Johnson Space Center in Houston as technical assistant to the manager of the Space Station Program Office, and manager of the Sustaining Engineering, Space Station Operations and Utilization Office. Bullman has extensive experience supporting NASA's Space Station activities.

Dr. Michael E. Polites has been reassigned as deputy manager of the Avionics Department in the Engineering

Directorate. He had served as deputy director of the Astrionics Laboratory in the Science and Engineering Directorate.

Polites joined Marshall in 1967 and has made significant contributions to various areas of research, including Skylab attitude control systems; pointing control systems of the Hubble Space Telescope and Atlas Space Shuttle mission; Gravity Probe B spacecraft system; and the guidance, navigation, and control subsystem for the U.S. Control Module of the International Space Station.

Daniel L. Dumbacher has been reassigned manager of the Structures, Mechanics, and Thermal Department in the Engineering Directorate. He previously served as deputy director of the Propulsion Laboratory in the Science and Engineering Directorate. Throughout Dumbacher's career, he has been involved in managerial and technical aspects of high propulsion technology. His assignments include serving as chief engineer, and later as assistant manager of Space Shuttle Main Engine Projects; chief engineer and manager of the Delta Clipper Advanced Experimental Project; and deputy program manager for NASA's X-33 Program at Lockheed Martin Skunk Works in Palmdale, Calif.

Dr. Ann F. Whitaker has been reassigned manager of the Materials, Processes, and Manufacturing Department in the Engineering Directorate. Prior to this assignment, she served as director of the Material and Processes Laboratory in the Science and Engineering Directorate.

Whitaker joined Marshall in 1963 and has served in progressively responsible positions. She has been recognized on numerous occasions for her many contributions and accomplishments to Marshall's space program.

Dr. Gabriel R. Wallace has been reassigned manager of the Engineering Systems Department in the Engineering Directorate. He previously served as deputy director of the Systems Analysis and Integration Laboratory in the Science and Engineering Directorate.

Wallace joined Marshall in 1964, assigned to the former Astrionics Laboratory. He has served in increasingly important positions at Marshall, including director of the Research and Technology Office, and deputy manager of the Technology Transfer Office.

Milestones to Apollo 11

Editor's Note: Almost 30 years ago, three Americans lifted off on a journey to the Moon atop a Saturn V provided by Marshall. To mark that anniversary, Marshall is planning an Apollo 11 30th anniversary celebration on July 17. The

Star is publishing some of its stories that led up to the launch of Apollo 11.

A Marshall Star article on July 9 reported, "In response to numerous requests from the press, Dr. von Braun will hold a press conference at

MSFC Thursday afternoon.

"A steady stream of newsmen have visited Marshall and other NASA centers for weeks in preparation for the Apollo 11 lunar landing mission. On a single day last week, for instance, four foreign TV networks were at work at MSFC."

'Take Our Children to Work Day'

This year a record number of children participated in "Take Our Children To Work Day" at Marshall — an event that began in 1994.

More than 550 children spent June 24 with a parent or special friend amongst futuristic space hardware, in cutting-edge laboratories or traditional offices, during "Take Our Children To Work Day" at Marshall.

A spinoff of the national "Take Your Daughter To Work Day," the Marshall Center event allowed both boys and girls to learn about their parents' careers and contributions to the space program.

The day's activities included an assembly program in Morris Auditorium, a pizza party with activities and visits to offices.

"I thought it was very neat how the rockets worked and all the Shuttle designs, the (RSRM) Shuttle nozzle and everything," said Jeremy Lawrence, 11, who accompanied his dad Tim, team lead of the Ablatives and Ceramics Team in the Engineering Directorate, to work. "I liked looking and seeing all that stuff coming in at the airport and the guppie. I had a really fun time." A guppie is a specially designed aircraft used primarily for transporting International Space Station hardware.



A brochure table was set up for children and parents to gather information.



Photos by Adeline Byford

Children shake hands with an inflatable astronaut "participating" in "Take Our Children to Work Day."



Alicia Beam, a manager in Marshall's Equal Opportunity Office, leads children in a Marshall cheer to start the day.



Photo by Emmett Given

Dom Amatore of the Media Relations Department receives a copy of "Rocket Boys" from Sandra Turner, Marshall's protocol officer.

Amatore wins prize in Apollo 11 slogan contest

Dom Amatore, deputy manager of Marshall's Media Relations Department, submitted the winning theme, "Celebrating the Past ... Creating the Future," for Marshall's 30th Anniversary Apollo celebration. For his entry, he received an autographed first edition of the memoir, "Rocket Boys," by Marshall retiree and author Homer Hickam.

The celebration will be held July 17 in conjunction with the annual Marshall Center picnic.

"We appreciate Dom's contribution and want to thank everyone who submitted a suggestion," said Sandra Turner, chairwoman of the 30th Anniversary Apollo 11 committee.

Information technology security: reality of network crime

A briefing on computer criminal activity will be held July 14 at 9 a.m. in Morris Auditorium. Thomas J. Talleur of the NASA Headquarters Office of Inspector General, Advanced Technology Programs, will speak.

NASA faces significant threats to its communications networks and advanced technology programs. This presentation will describe criminal activities on NASA computer networks, and show how these activities, coupled with the evolving technology environment, will continue to impact crime, security and commerce.

All Marshall employees and on-site contractors are encouraged to attend this briefing on computer crime activity and its affect on NASA's information security.

For more information, call Marshall Information Technology coordinator Steve Jones, at 544-4373.

X-34

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from the X-34 using fluorescent dye. The flight also was used to check the electronic connections between the mated aircraft, data collection systems and the video camera system on the L-1011.

The planned two-and-a-half hour test was shortened after a safety observer aboard a NASA F-18 chase plane accompanying the flight noticed that a fuselage panel on the L-1011 appeared to be vibrating. The panel was located on the bottom, aft fuselage of the carrier aircraft behind the X-34. Based on video from the chase plane, test officials decided to end the flight. No further details were available pending a close inspection of the aircraft and extensive flight test data.

Marshall manages the X-34 program for NASA. Dryden Flight Research Center is supporting the captive carry part of the program with flight testing and ground vibration tests. Orbital Sciences Corp., Dulles, Va., is designing, building and test flying the X-34 for NASA.

Obituaries

Smith, Harvey F., 56, died June 22. He retired from Marshall in January 1998 where he worked as an aerospace engineer. At the time of his death he worked as a contractor with Pace & Waite Inc. in the Microgravity Program Office. He is survived by his wife Carolyn A. Smith.

Hugus, Robert E., 81, died May 19. He retired from Marshall in October 1981 where he worked as technical engineering operations management in the Space Shuttle Projects Office. He is survived by his wife Nan B. Hugus.

Golden, Jimmie W., 79, died April 4. He retired from Marshall in June 1973 where he worked as a supply clerk.

Marshall's annual picnic, Apollo 11 30th Anniversary to be held July 17

The Annual Marshall Picnic will be held Saturday, July 17, at the Marshall picnic grounds. All NASA employees, contractors, retirees and family members are invited to attend. The theme for the picnic is "Celebrating the Past ... Creating the Future."

Picnic T-shirts are on sale. The T-shirt is blue with a four-color logo on the back and a gold inscription on the left side of the chest. July 6 is the last day to order these and the order must have the payment with it. Look for the order form in your mailbox or go to the picnic Website to see a color picture and ordering information. The picnic Website address is: www1.msfc.nasa.gov/picnic

There is no charge to attend the picnic. However, if you wish to purchase a meal ticket for either a barbecue chicken plate, barbecue pork plate or a garden burger with all the trimmings, tickets are \$5 each. Meal tickets are on sale through July 14 from 11 a.m.-1:30 p.m. at the cafeterias in buildings 4203, 4610, 4471 and 4708, and the NASA Exchange in Bldg. 4752. Hot dogs, chips, ice cream and drinks also can be purchased at the picnic.

Volunteer are needed to staff the following booths: bingo; beer; event tickets; soft drinks; and cotton candy. To volunteer, call Charles Sullins at 544-7335 or by e-mail by July 9. Organizations are asked to adopt a booth for the day.

Coed volleyball will begin the week of July 12 with the finals to be held on July 16.

Call Tim Huff at 544-4377 or Dana Tipton at 544-7879 for more information.

An easy-paced relay run to symbolize generations of Marshall teams "passing the torch" from the Apollo era to today,

and taking it forward into the future will kickoff the celebration at the picnic grounds. The run will convey that the legacy established by Marshall's Apollo-Saturn team has been maintained over the past 30 years and is still alive and strong. NASA Alumni are invited to participate.

Following the kickoff run will be the children's parade. At the children's stage there will be two performances by the Community Ballet Association, two magic shows by Murphy the Magician and the Fantasy Playhouse Children's Theatre.

Following the picnic, door prizes will be awarded after the fountain dedication ceremony at the Bldg. 4200 complex after the picnic. Employees must be present at the drawing to win the prizes.



Space Transportation Directorate focuses on teambuilding

by Cindy Upton

Space Transportation Directorate is one of the new organizations experiencing big changes due to the recent Center reorganization. The manpower count increased from approximately 60 to 500 employees, and everyone was moved to the same building — the birth of a new team.

“Certainly any organization undergoing change this great can expect growing pains,” said Space Transportation Deputy Director Rick Bachtel. “These changes are an opportunity to build synergy and a sense of family with the new team, and I believe we have been able to make great strides toward this goal in a short time.

“For our directorate to become unified, the precursor must be synergy,” Bachtel said. “To achieve this, we must all embrace the most important aspect of an effective organization, which is communication. My belief is that we must get to know our working partners as friends and family, outside of our everyday work environment. This will strengthen our understanding of each other’s personalities and capabilities which we can then translate into a more successful workplace.”

Bachtel has been working with Leah Tabbert, who has spent the last three months at Marshall completing a developmental assignment as part of the Federal Women’s Executive Leadership Program, which is a year long intense management training program. She is among the first representatives from this program to be assigned to a NASA Center.

Tabbert is employed by the Federal Aviation Administration in their Flight Standards District Office in Boise, Idaho. “The FSDO is responsible for aircraft certification, enforcement and accident investigation,” Tabbert said. “Through my 25 years as an administrative officer with the FAA in Idaho, Montana and Frankfurt, Germany, I have realized great benefits can be achieved through the encouragement of employee teambuilding and morale. I have truly enjoyed working with the Space Transportation Directorate. The Directorate’s work is fascinating, and of great benefit to NASA and the American people.”

Tabbert filled the role of a cultural officer working to encourage employee morale during and after the reorganization and move. One tool that was quickly put in place to facilitate improved communication flow is an internal Website, called the Space Transportation Directorate Weekly, which serves as one-stop shopping for day-to-day activities. Topics such as safety, training, messages from the Space Transportation director, meeting minutes, calendars and conference room schedules are included.

“We want everyone in the directorate to have easy access to available information,” Tabbert said. “Also, there is an ‘STD Listens’ button, which allows employees to anonymously ask questions, and make comments concerning directorate operation or any morale issues.” The Website can be accessed through “Inside Marshall” under the NASA/MSFC at Work button.

Now that the new Space Transportation team is in place, the group is celebrating their formation and continued success. Recently, the management team hosted a picnic celebration at the



Photo by Dennis Olive

Robert Garcia, left, team lead of the Computational Fluid Physics Team; Rick Bachtel, acting director; Leah Tabbert, Federal Aviation Administration; Helen McConnaughey, manager of the Vehicle and Systems Development Department; and Robert Champion, team lead of Vehicle Propulsion Systems hang the first “Wall of Memories” in the Space Transportation Directorate conference room.

pavilion to welcome new members and kick off the formation of the new team. The management team members purchased and served the food, and wore special red, white and blue hats to symbolically “tip their hats” in gratitude for a job well done during the reorganization.

“This is the first of many such planned celebratory events,” Bachtel said. “Leah placed a ‘Wall of Memories’ photo board in our main conference room to capture the fun of our first picnic. We will add more boards for future celebration events. This photo board also allows others who borrow our conference room to see how the Space Transportation family celebrates,” Bachtel said.

Some of the ideas Tabbert and Bachtel have implemented came from the book, “Nuts! Southwest Airlines’ Crazy Recipe for Business and Personal Success.” “We really took this book to heart,” Bachtel said. “By following through on just a few of the ideas about employee ownership and values presented in ‘Nuts,’ we have already realized great benefits. A quote I particularly like is ‘Celebration is what families do.’ The word ‘family’ in the Space Transportation Directorate is not some worn out cliché or management buzzword, but is embraced with devotion and sincerity. The concept of family is very important to the management of this directorate.”

Even though Tabbert has completed her tour of duty at Marshall, the work begun by her serves as a prototype for continued development of teambuilding activities within the Space Transportation Directorate, as well as offers ideas for other organizations to try as well. “Through these successes, we can learn ways to better perform in our challenging task to make space transportation less costly and more accessible,” Bachtel said. “Everyone working as a cohesive team is a sure way to give us something to celebrate.”

The writer is the team lead for the Internal Relations and Communications Department.

Chandra X-ray Observatory installed, being tested for launch

The Chandra X-ray Observatory, with the attached Inertial Upper Stage booster, is now installed into the payload bay of Space Shuttle Columbia. The payload was installed Sunday in preparation for a July 20 launch.

On Wednesday, the interface verification test took place to make sure the electrical connections were working properly and ensure the ability of the crew to command the payload from Columbia's flight deck.

Friday, an end-to-end test will make certain the communications path to Chandra is working, commanding it as if it were in

space aboard Columbia. Participating in the test will be Chandra's Operations Control Center in Cambridge, Mass.; Mission Control at the Johnson Space Center, Houston; the Inertial Upper Stage control facility at Sunnyvale, Calif.; and the communications assets of both the Deep Space Network and the Tracking and Data Relay Satellite system.

The remaining major steps toward launch of Chandra involve the Inertial Upper Stage.

On July 7, Marshall's Fred Wojtalik, Chandra program manager, will participate in an overview of mission operations briefing, and Dr. Martin Weisskopf, Chandra project scientist, will discuss science to be conducted by Chandra. The briefings are expected to be carried live on NASA Television beginning at 8 a.m.

Columbia's payload bay doors are to be closed for flight on July 17, with launch of STS-93 set for July 20. However, an official launch date will be set during the Flight Readiness Review July 8.

Apollo 11

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Gillespie to Marshall July 12 where they will sign a joint proclamation recognizing Marshall's contributions to the Apollo program.

On July 16, plans call for Centerwide broadcast of Apollo era historical film footage. The showing will coincide with the 8:32 a.m. launch on July 16, 1969, of the Marshall-developed Saturn V that lifted the three Apollo astronauts on their journey to the lunar surface.

Following that broadcast, Marshall employees will have an opportunity at 10 a.m. to hear Marshall retiree and author Homer Hickam talk about his book, the "Rocket Boys," and about filming the movie "October Sky." Hickam will speak in Morris Auditorium in Bldg. 4200. After his remarks, he will hold an autograph session in the lobby.

On July 17 celebration activities continue at Marshall. At 9 a.m. an easy-paced relay run will symbolize generations of Marshall teams "passing the torch" from the Apollo era to today, and taking it into the future. Rocket Park at the Marshall Center has been selected as the starting point for the relay race. From there, runners will head for the Marshall Center picnic grounds. Those who would like to participate should e-mail Jerry Berg, who is coordinating the event.

Marshall's annual children's parade will mark the start of the Center's annual picnic festivities on Saturday. Games, parades, entertainment, exhibits, door prizes, and food will all be part of the picnic fare. Astronauts will also be present for autographs and photographs.

At 3 p.m. on July 17 the focus for the Apollo 11 celebration activities will shift to the courtyard of the Wernher von Braun Office complex. That's when the Apollo astronauts will participate in a "Footprints to the Future" dedication ceremony. Apollo astronauts will cast their footprints as the starting point for Marshall's pathway to the moon, the stars, and beyond. The event will also symbolize the contributions made by the many Marshall Saturn/Apollo veterans expected to attend the ceremony. Other special invited guests are local and state elected

officials as well as NASA Administrator Dan Goldin; Joe Rothenberg, associate administrator for Space Flight; and General Spence Armstrong, associate administrator for Aerospace Technology.

In addition to casting the footprints, the ceremony will include the unveiling of a work designed by Marshall artist Jack Hood. The fountain is intended to represent the Center's future role in space transportation.

The celebration at Marshall also coincides with the start of the von Braun Celebration of the Arts in Huntsville celebrating the 50-year cultural and technological legacy of Dr. Wernher von Braun and the members of his famed German rocket team. The yearlong celebration will include a series of events, performances, exhibits and historical, cultural and educational programs. As part of the celebration, Marshall has arranged for the local premier of NASA's "The Dream is Alive" art exhibition in the Grand Hall of the Early Works Museum in Huntsville. The exhibition will be on display through August 15. Admission to the art exhibition is free.

From July 18 through July 20, celebration activities at the Space & Rocket Center include a nightly re-enactment of the first manned Moon landing. Many of the Apollo astronauts are scheduled to attend the July 18 re-enactment that will be performed by actors. In addition, the Space & Rocket Center has designated July 19 as "Marshall Space Flight Center Day" in honor of Marshall's vital role in the Saturn/Apollo program. Limited complimentary tickets — available through organizational directors — will be available to Marshall civil service employees to the re-enactment on July 19. Regular ticket information for the re-enactments was published incorrectly in the Marshall Star last week. Tickets on Sunday night July 18 are \$10 for adults and \$7 for children ages 4-12. Tickets on Monday and Tuesday nights are \$8 for adults and \$5 for children. All tickets must be purchased in advance. Tickets are available at the Space & Rocket Center. For information, call 721-7106.

The writer works in the International Relations and Communications Department.

Employee Ads

Miscellaneous

- ★ Designer suits, used during fashion shows, size 42L. Leave message at 512-6618. 852-8763
- ★ Frigidaire 18,000 btu window unit air conditioner, \$250. 337-0895
- ★ Firewood, oak and hickory, \$40 per load, you haul. 534-8603
- ★ Baby crib, light oak w/mattress, \$80; changing table, \$30. 961-0044/882-3918
- ★ New Big Bertha driver, metal head and shaft, 9 degree loft, \$110. 498-3122
- ★ Computer, 333 MHz, 64MB, 2.1GB, 33.6k, 32x, 3D sound, no monitor, \$350. 971-9493/219-6862
- ★ Snappy 3.0 video capture system, \$65; two men's Nishiki 10-speed bikes, \$125 for pair. 350-7461
- ★ Murray push mower, 20", 3.5 horsepower Briggs & Stratton, new blade, \$35. 883-9278
- ★ Riding lawn mower, 30" cut, 11hp, \$180. 859-9856
- ★ Frigidaire built-ins, 27" self-clean oven, 30" stove top & microwave, \$150; Elkay triple sink, \$50. 355-8589
- ★ Hard drive, 5.7GB, reconditioned by factory, sealed static bag, \$85. 828-2832
- ★ Tapestry couch, two burgundy wing-back chairs, will sell separately. 837-0085
- ★ Twin axle boat trailer for 22' Cobalt or similar boat, \$1,500. 464-5008
- ★ 1996 Kawasaki Vulcan 800 classic, loaded, new tires, 125K miles, \$6,500. 828-1640
- ★ Black Labrador Retriever puppies, 1 male, 2 females, \$50 each, pictures: <http://www.homestead.com/petros77/>. 721-9831
- ★ KORG N1 professional 88 keyboard, \$1,300; Roland MC-50 MkII sequencer, \$450; Roland 300 series keyboard amp, \$350. 773-5661
- ★ 1997 Astro fish/ski 20' boat, 200hp, trolling motor, all options, \$17,900. 922-1169
- ★ Golf shoes, Nike, man's size 8, never used, all weather soles, \$35. 881-1249

Vehicles

- ★ 1986 Honda, CRX-si, sunroof, never wrecked, recent paint, am/fm/ac, 127K miles, \$3,500. 883-2948
- ★ 1995 Ford Taurus GL, keyless entry, champagne, 14,700 miles, \$9,800. 881-0755
- ★ 1991 Mazda 929 S, 115K miles, loaded, leather, CD changer, \$4,390. 726-0278

- ★ 1992 Buick Roadmaster limited, \$8,000. 534-8603
- ★ 1993 Buick Regal, light green, one owner. 729-6301
- ★ 1995 Ford Crown Victoria LX, 77K miles, all options, silver/red leather, \$10,500. 881-1359
- ★ 1996 Saturn SC2 coupe, 25K miles, auto, sunroof, a/c, alloy wheels, 5-speed, \$9,900. 722-0872
- ★ 1990 Chevy Beretta, green w/gray interior, 4-cyl. auto/air/cruise, am/fm cassette, new paint, 112k miles, \$2,700. 350-9672
- ★ 1996 Ford Probe SE, red/tan, two-door, 5-speed, a/c, alloy wheels, new tires, \$8,500. 876-1125
- ★ 1993 Mustang GT 5.0, hatchback, 5-speed, a/c, sunroof, black/gray, alloy wheels, \$6,850. 753-2278
- ★ 1995 Nissan 200 SX, white, manual auto mission, CD player, sunroof, 72K miles, \$8,100. 931-6303
- ★ 1981 Dodge 150 pick-up, slant six, short wheel base, \$1,400. 518-9712
- ★ 1998 Honda CRV EX, 5-speed, 4-wd, black, CD player, pw/pdl, 19K miles, \$19,000. 828-6247

Wanted

- ★ Voice communication system for use between two fixed sites approx. 31 miles apart. 881-6040
- ★ Oscilloscope and/or other electronic equipment. 233-5247

Free

- ★ Kittens, 1 male, 2 females, all are litter box trained. 971-1414
- ★ Two female beagle/rabbit dogs, 2 year old has been spayed, 1 year old has not. 931-438-2709
- ★ Mechanical/metallurgical engineering books and samples of materials from 1960s and 1970s. 881-8648

Found

- ★ Key, Bldg. 4200 loading dock, call 544-4758 to identify.

Center Announcements

- ☛ **Potable Water Outage** — A potable (drinking) water outage will be from 7 a.m. Saturday to 6 p.m. Monday for the following buildings and areas: NASA Sewage Plant, 4762, 4200 area (all buildings), 4614, 4628, 4607, 4612, 4605, 4194, 4187, Airfield (4800 area), 4424, 4700 area (all buildings, including Marshall Activities Bldg.

4752), 4643, 4622/23, 4610, 4619, 4611, 4191 and 4189. The Army is installing valves at or around water tanks to improve water system efficiency. No test area buildings are affected by this outage nor is Bldg. 4663. Buildings not on the list probably will not be affected. For more information, call Cleve Nilsen at 544-8081.

- ☛ **TMA Scholarships** — The Marshall Association is offering two scholarships to dependents of Marshall employees who are high school graduates entering a college or university in the fall as freshmen. Value of the scholarships will be at least \$1,000 each. One scholarship will be for a student studying science, engineering or mathematics; the other for a student studying business, teaching, arts, etc. An application form is posted on "Inside Marshall." To apply, download and complete the form, and send to Axel Roth, FD01, Bldg. 4203, room 3414. Application deadline is July 9.

- ☛ **MARS Tennis Tournament** — The MARS Tennis Club is holding an Open Doubles Tournament July 10 beginning at 8:30 a.m. Teams are asked to be at the tennis courts at 8 a.m. for check-in and warm-up. To participate, call Ronda Moyers at 544-6809.

- ☛ **MARS Fishing Club** — Results of the Guntersville Lake/Goosepond fishing tournament held Saturday: first place — Alex Rawleigh and Deon Smith with fish weighing 14.09 lbs.; second place — Joe Glover and Charles Kilgore with fish weighing 10.89 lbs.; and third place — Ross Evans and Charlie Nola with fish weighing 7.37 lbs. Big fish honors went to Kilgore with a 5.33-pound bass. The next tournament will be held July 9 at Wheeler Lake, First Creek. It is a Bass/Buddy Tournament, so grab a partner, put fresh batteries in the flashlight and join the fun. For more information, call Kilgore at 544-9437, Don McQueen at 544-9073 or Charlie Nola at 544-6367.

- ☛ **NARFE Meeting** — The National Association of Retired Federal Employees (NARFE) will meet July 10 at 9:30 a.m. at the Senior Center on Drake Avenue. Dr. Larry Robey, Madison County Health Officer, will speak on senior health issues. For more information, call 837-0382 or 881.3168.

- ☛ **MARS Flag Football** — Marshall employees and on-site contractors can sign-up to play men's and women's flag football by calling Len Bell at 544-6724 or send e-mail to: len.bell@msfc.nasa.gov

- ☛ **Photo Lab Retirees Meet** — Photo Lab retirees meet Tuesday at 9:30 a.m. at the Shoney's on University Drive and Memorial Parkway. For more information, call Charles Allen at 852-0917.

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